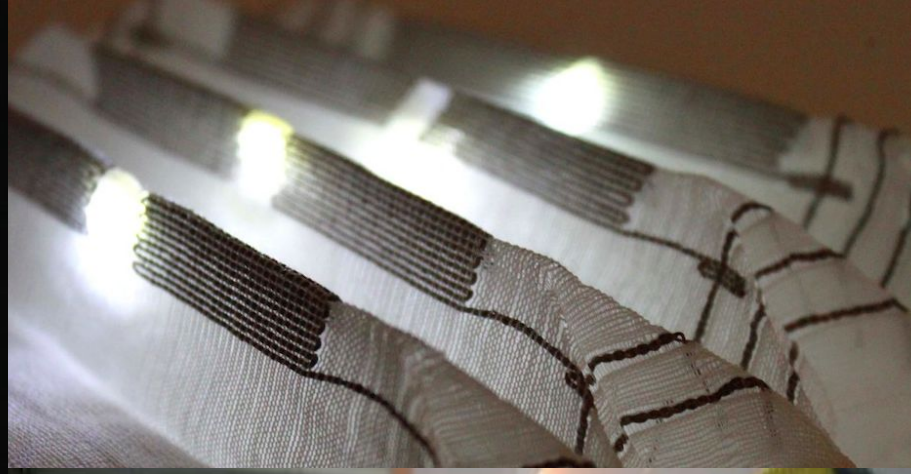
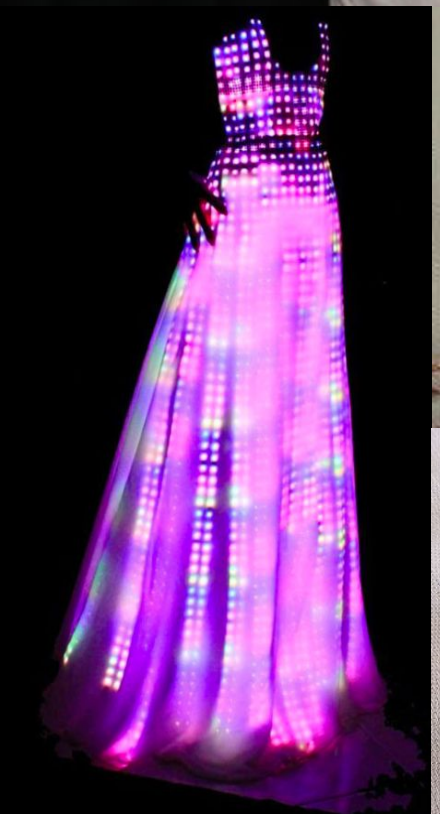
# GETTING STARTED with e-TEXTILES

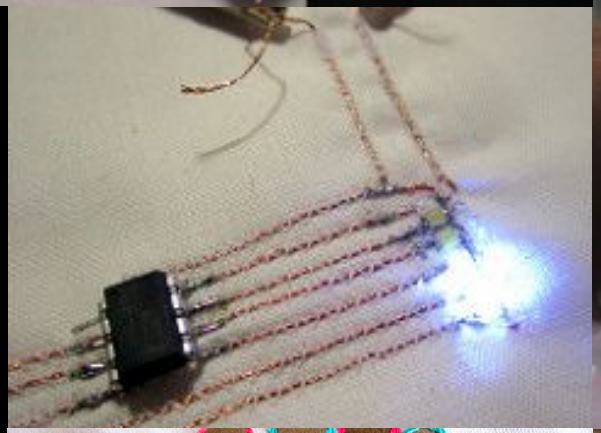
# THE PLAN

1. eTextiles Review
2. Hands-on Activity

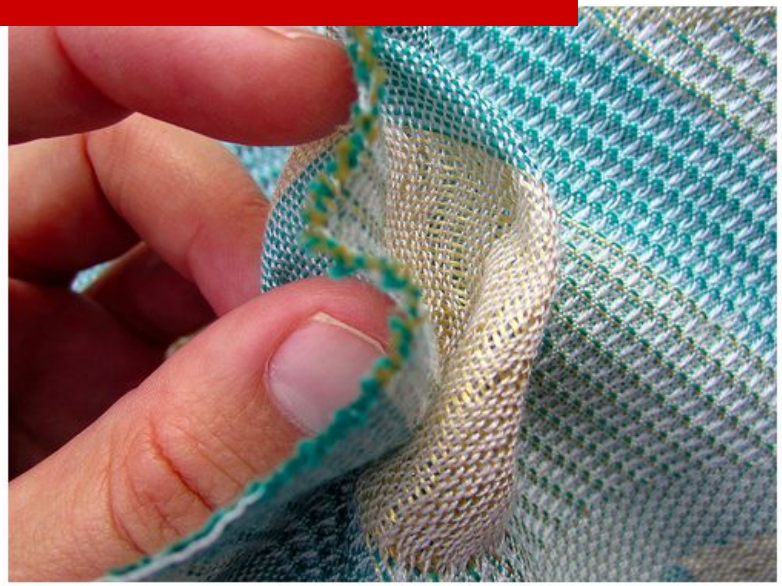
# eTEXTILES



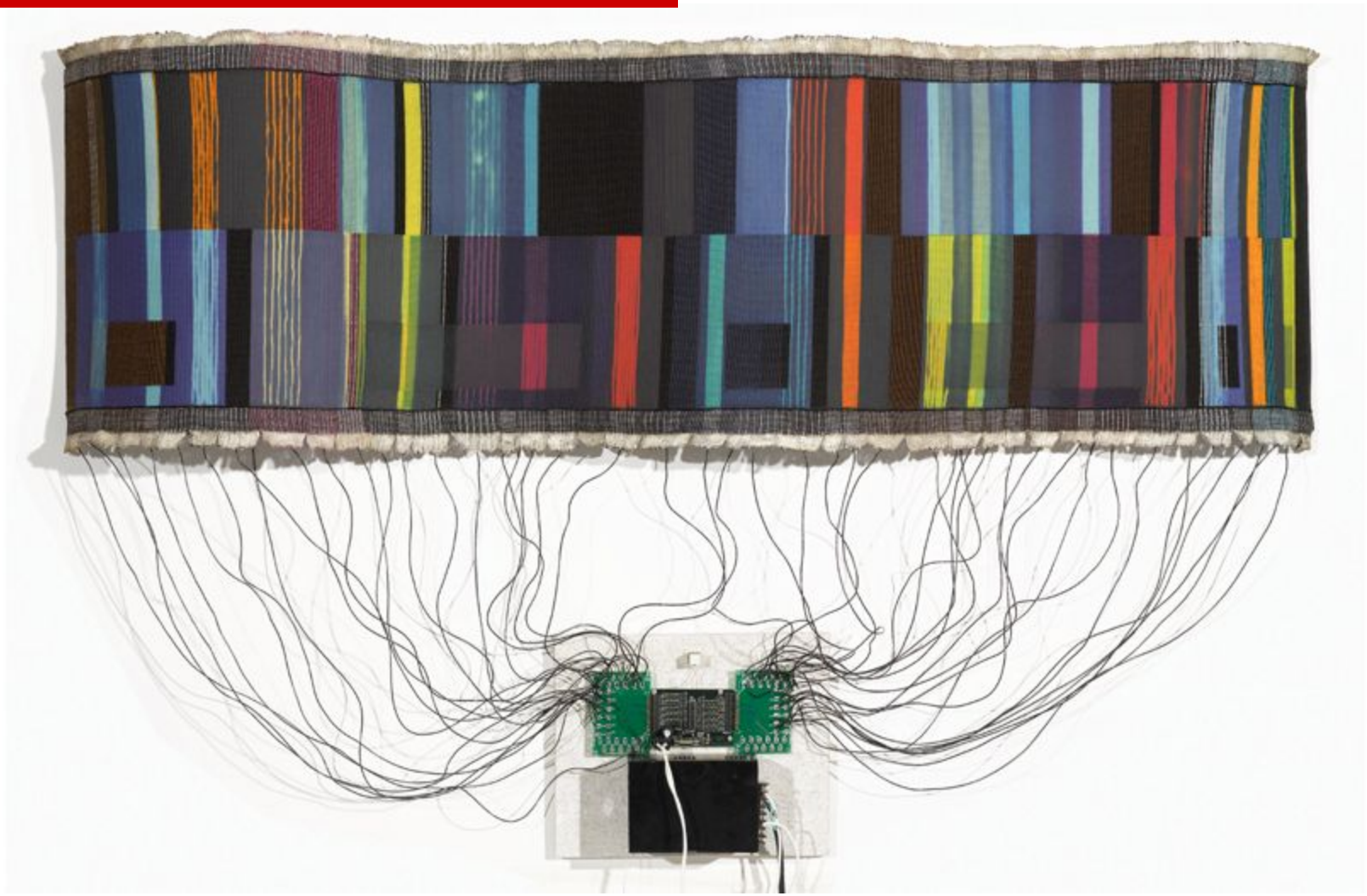




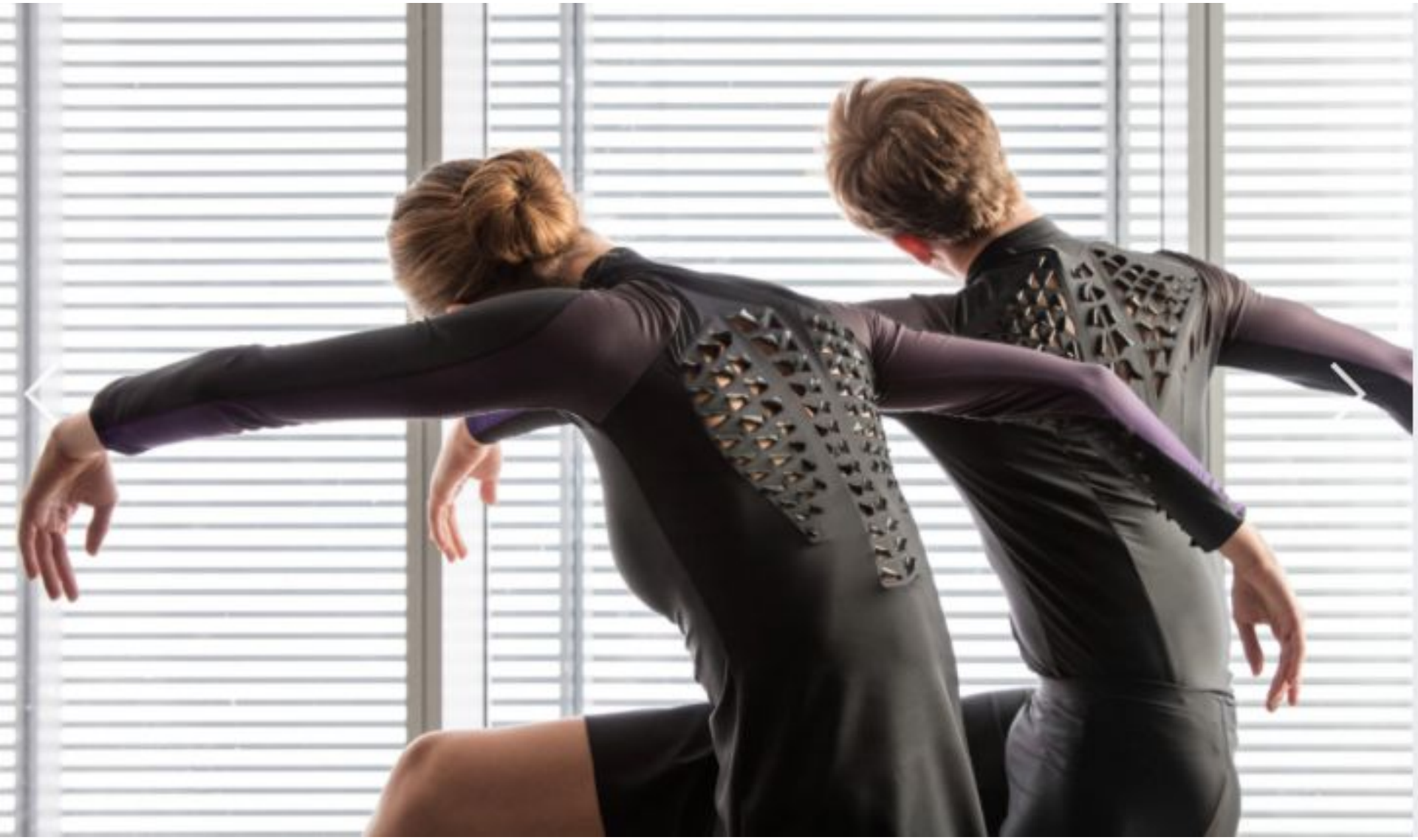
# KOBAKANT



# MAGGIE ORTH

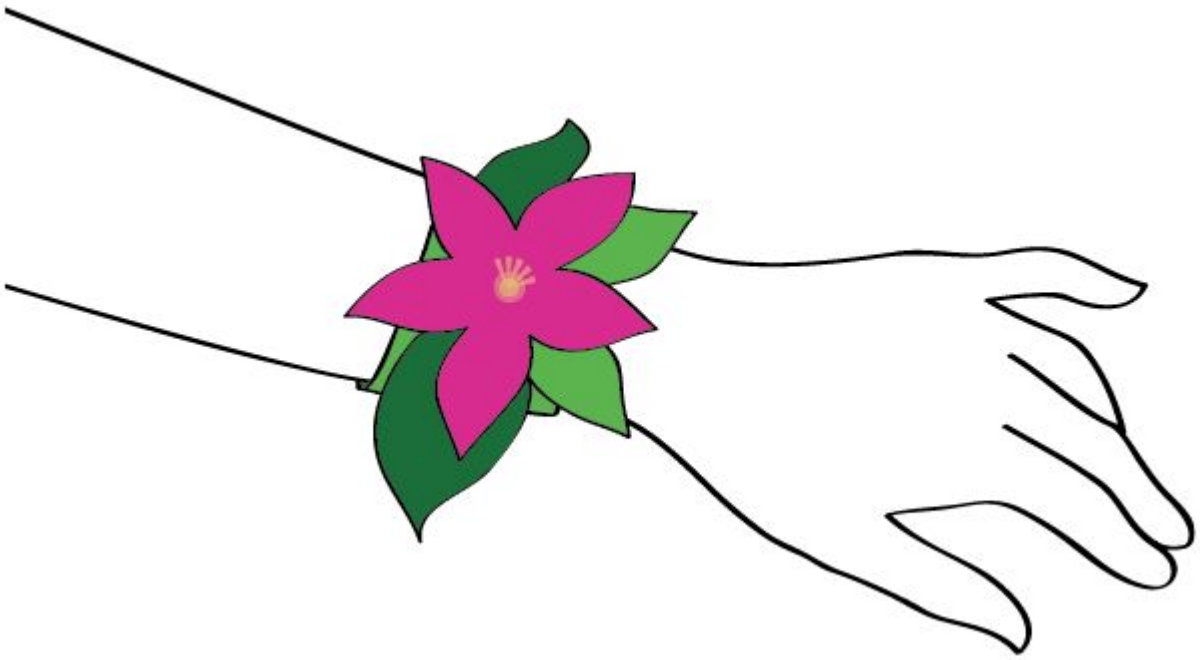


# bioLOGIC



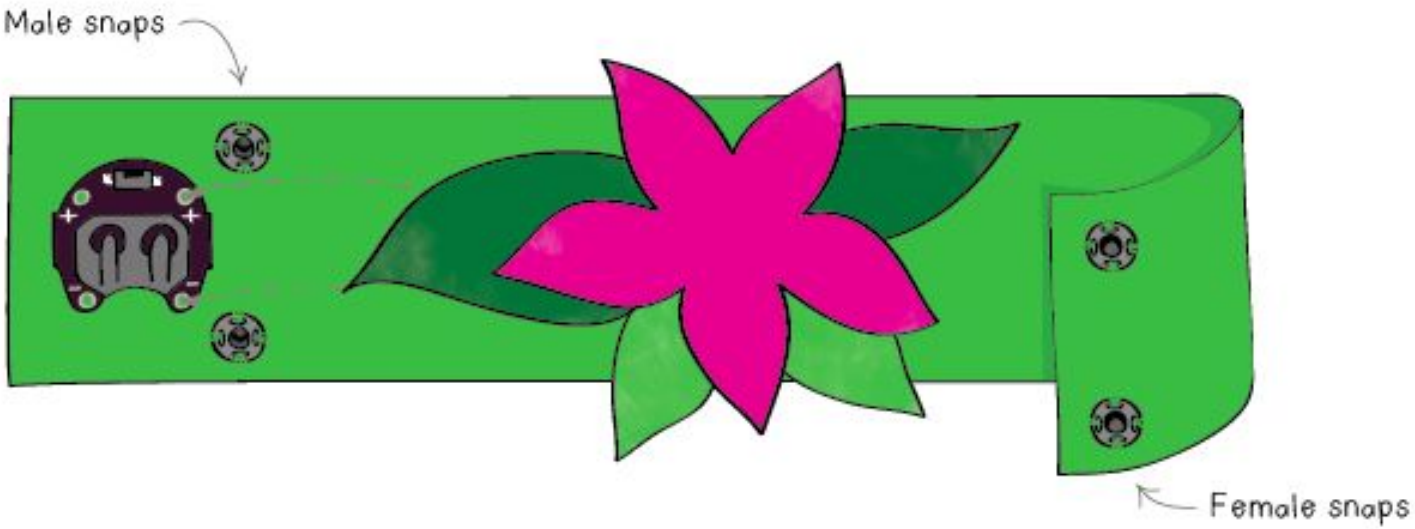

LET'S
SEW

# LIGHT-UP WRISTBAND



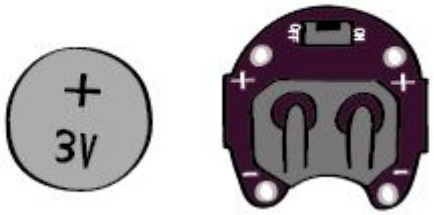
We’re going to create a wearable project by sewing a simple circuit using a battery and and some LEDs.

# THE GOAL

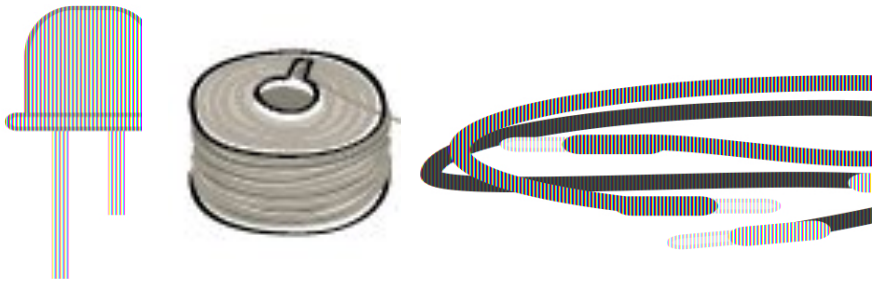



- LEDs turn on when you close the snap on the wristband;
- LEDs turn off when the snap is open.

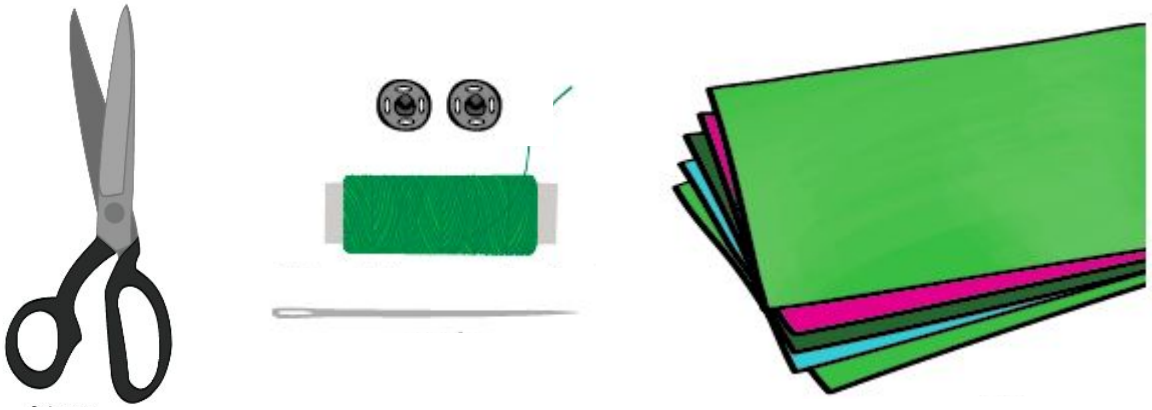
# MATERIALS




Battery & Battery Holder

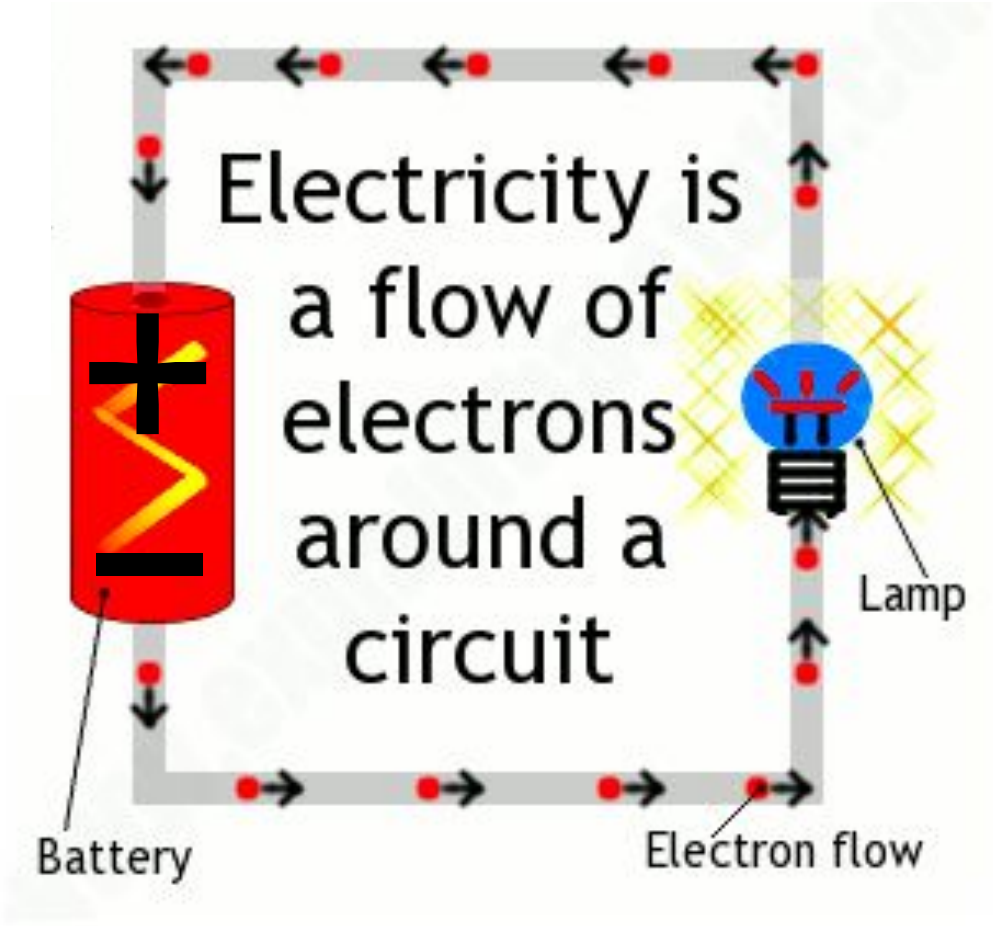


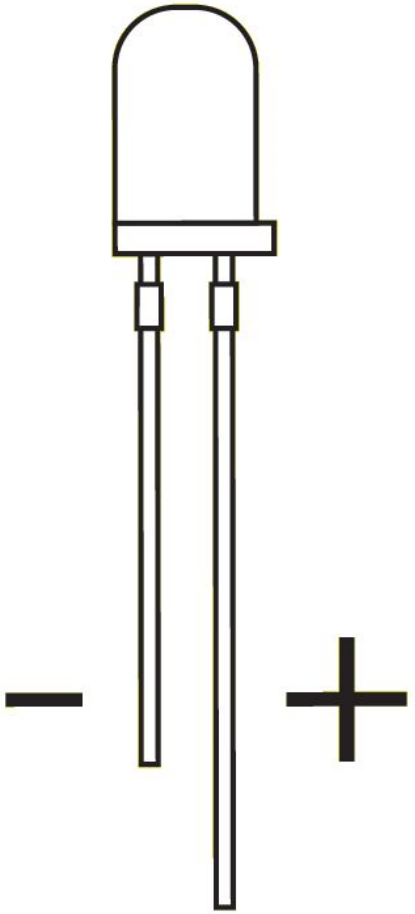
LEDs, Conductive Thread & Alligator Clips



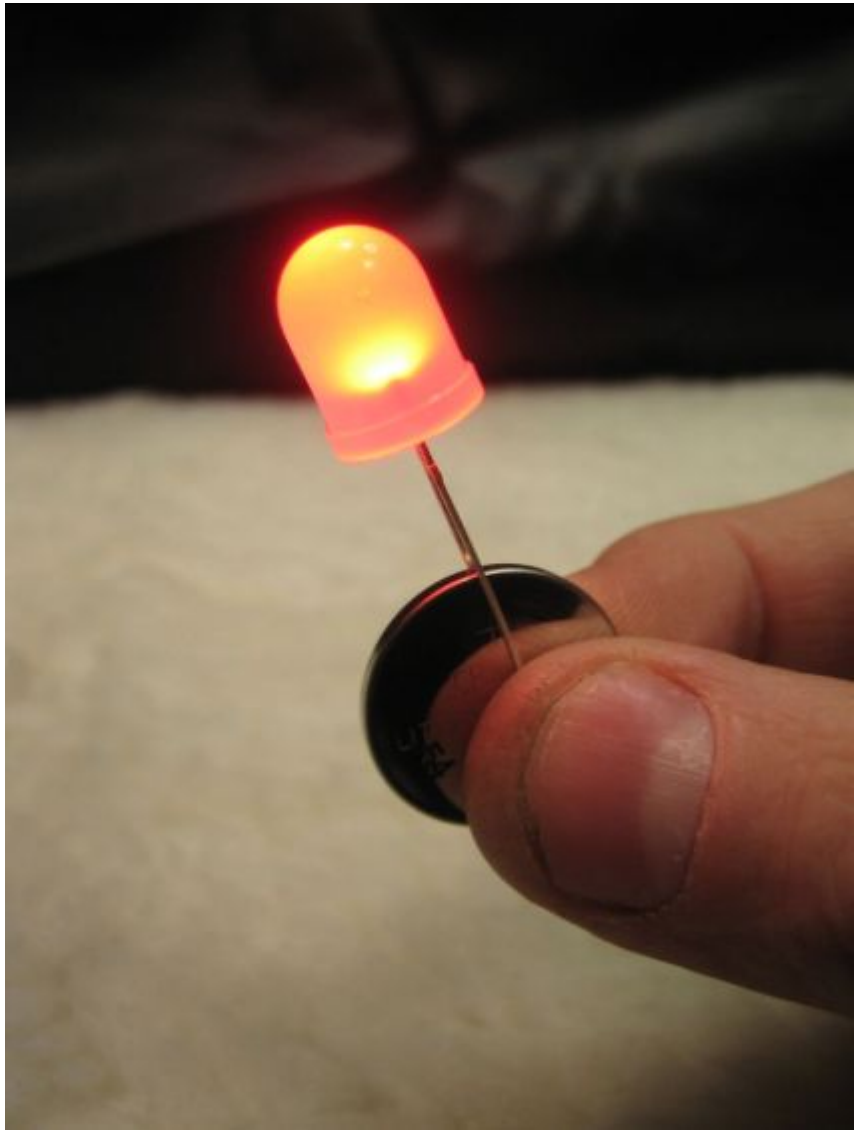
Scissors, Metal Snaps, Needle, Felt

# CIRCUITS


Electricity is a flow of electrons around a circuit
Lamp
Battery
Electron flow

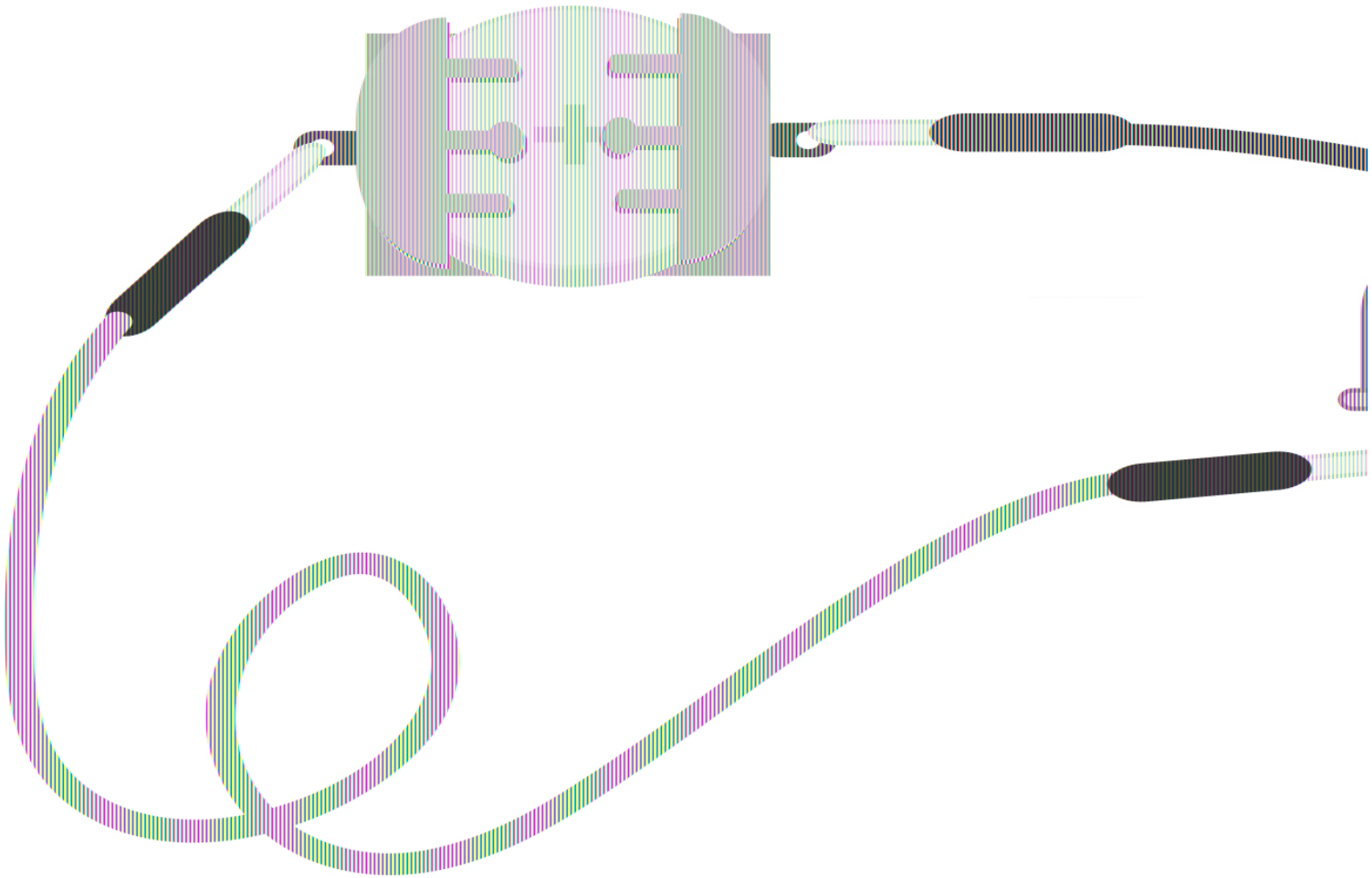


# PROTOTYPE

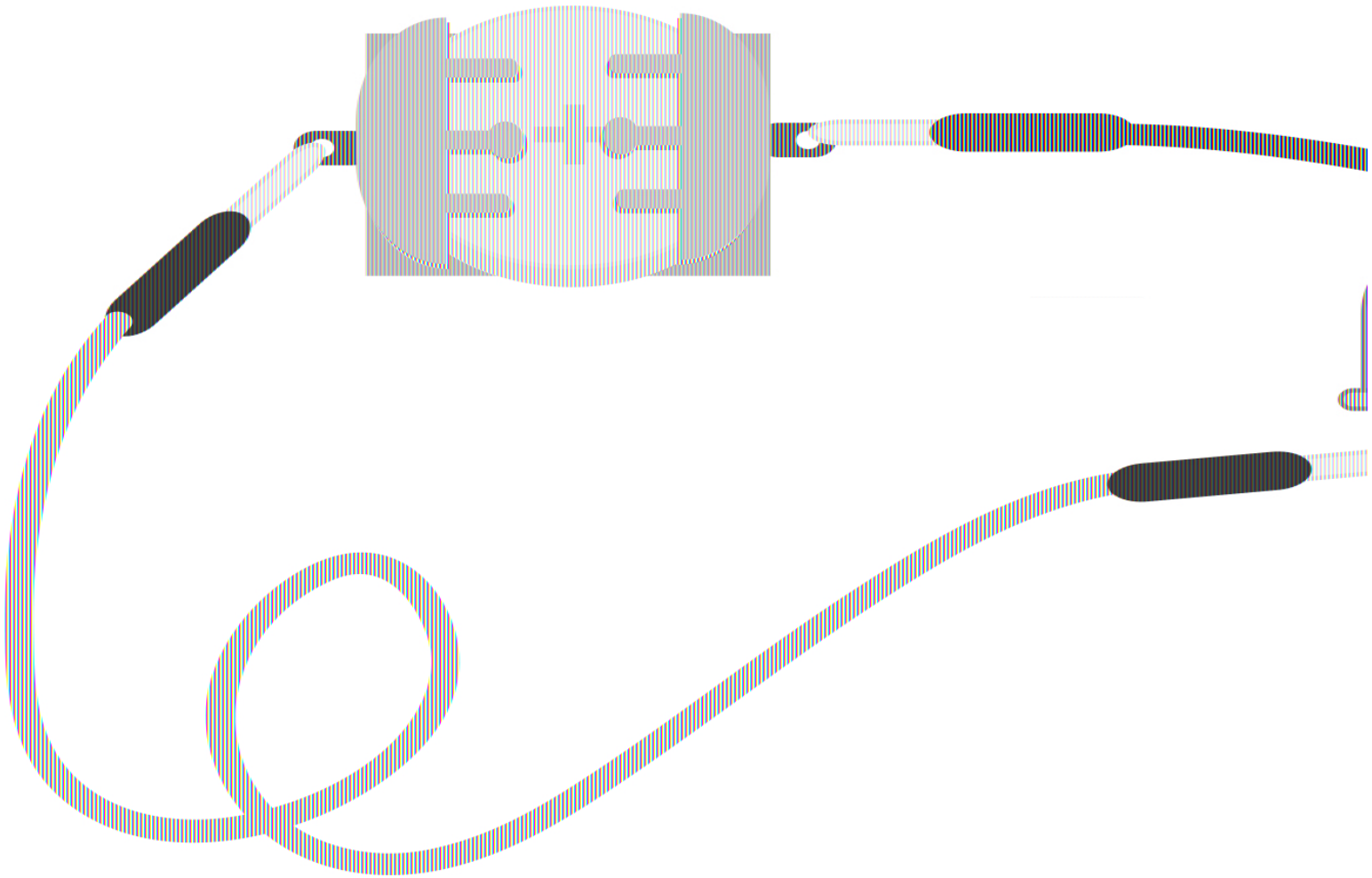


1. Pinch the LED legs to the battery;
2. Flip the battery around;
3. What happens?

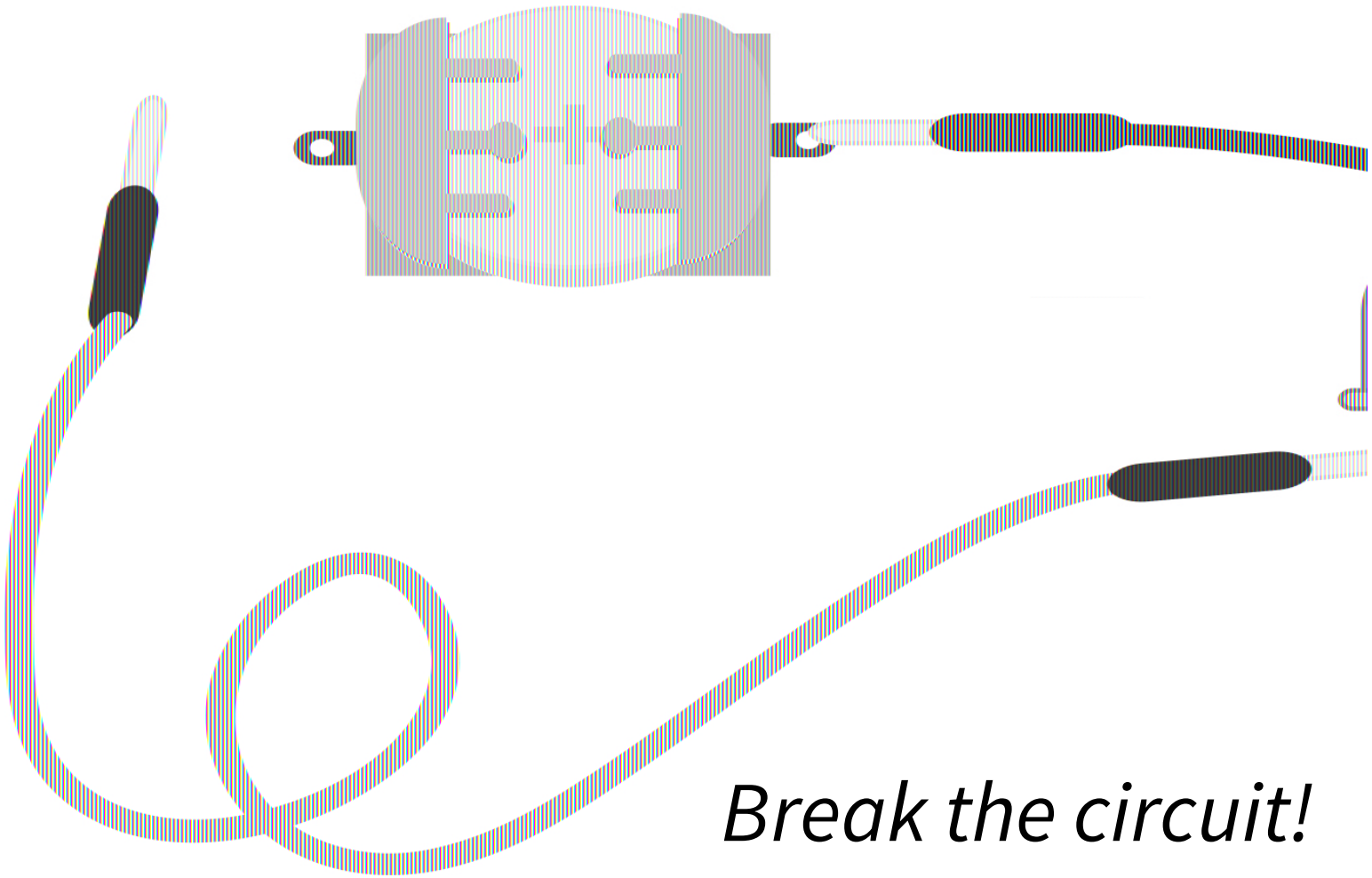
PROTOTYPE



# ADD A SWITCH

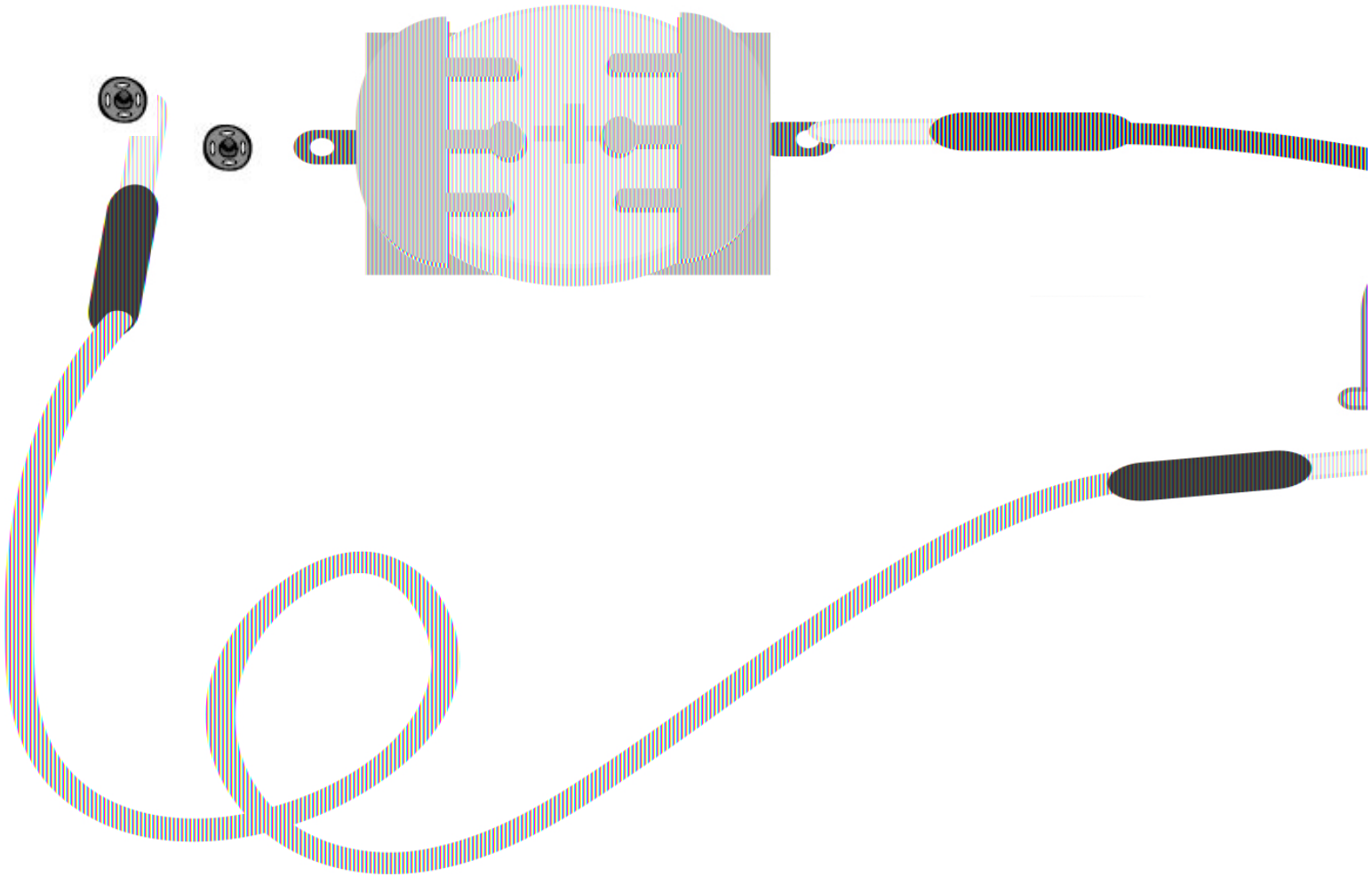


# ADD A SWITCH

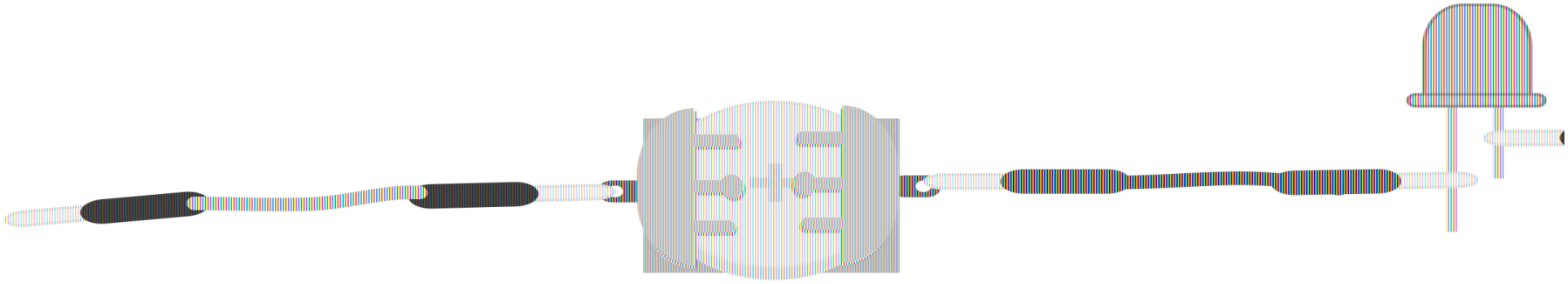


*Break the circuit!*

# ADD A SWITCH

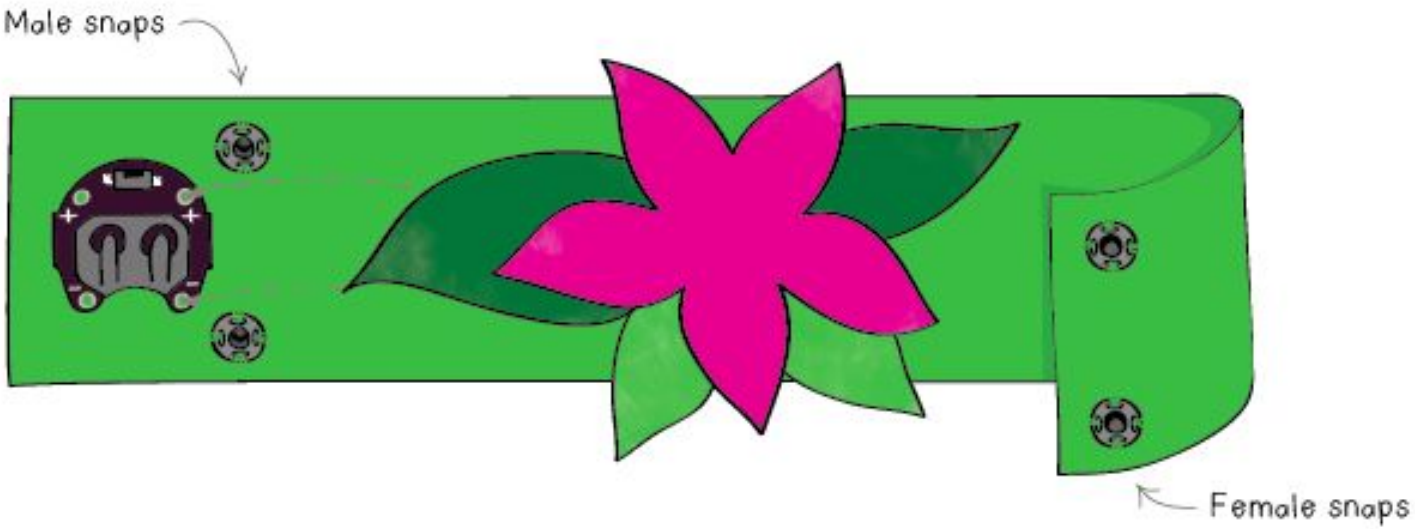


# CIRCUIT LAYOUT



Stretch it out  like a wristband.

# THE GOAL

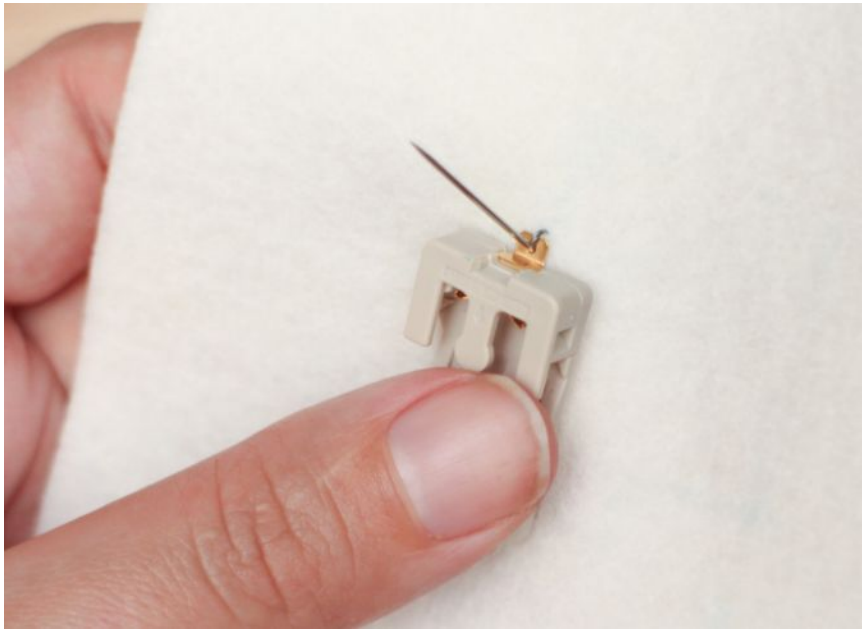



- LEDs turn on when you close the snap on the wristband;
- LEDs turn off when the snap is open.

# SEWING

- Cut a piece of fabric to size;
- Lay out the components;
- Plan for embellishments & surface treatments;
- Get creative!

# SEWING



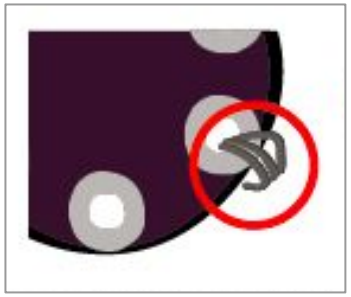
Sew around  the loops to create a secure connection.

Twist the legs of your components to make sewable loops.

# SEWING


*Running stitch to sew between components.*

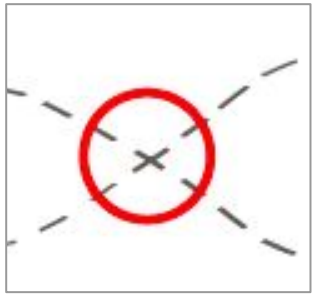
# THINGS TO AVOID



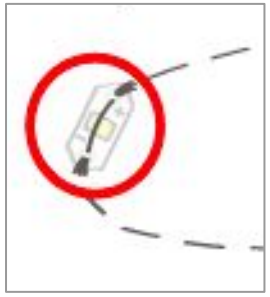
Loose Threads

Unravelled Knots

Knot Tails Touching



Overlapping Stitches



Stitching Across Components

Thread Touching Other Connections

# MATERIALS

And lots more!

**Experiment and get creative.**